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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,144	07/23/2003	Minoru Kawahara	450100-04654	8275

7590 04/28/2006

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EXAMINER

LE, DIEU-MINH T

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/625,144	KAWAHARA, MINORU	
	Examiner	Art Unit	
	Dieu-Minh Le	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/15/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office Action is response to the communication filed on 12/15/03 in application 10/625,144.
2. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-6, 11-12, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 5, 11, and 17, line 4, last "said second data" need to change to --said **first** data-- since the second data should resizing to first data, NOT itself? Clarification is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-18 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 13, Applicant claims "A program for making a computer ...", not having **computer instructions/code, stored in a computer readable medium** and being **executed by a computer**. A computer program, not having computer instructions being executed by a computer or without the computer-readable medium needed to realize the computer program's functionality, is nonstatutory functional descriptive material [See MPEP 2106]. The examiner recommends that if the applicant is trying claim a product claim, the following example is suggest:

(A machine readable medium having stored thereon data representing ... of instructions, the ... instructions which, when executed by a machine, cause the machine to perform ... of instructions in a system...)

Appropriate correction is required.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suma et al. (U.S. Patent 4,680,763 hereafter referred to as Suma) in view of Otaka et al. (U.S. Patent 5,313,471 hereafter referred to as Otaka).

As per claim 1:

Suma explicitly teach the invention. Suma teaches:

- A data processing apparatus comprising [abstract, fig. 1-4, col. 1, lines 5-10];
- error detection means for detecting first data for an error [fig. 1-4, col. 1, lines 40-49 and col. 3, lines 23-47];

- error concealment means for concealing an error if any found on said first data by use of said second data read from said data recording medium said first data being read from a data recording medium storing said first data [fig. 1-4, col. 3, lines 23-47].

Suma does not explicitly teach:

- second data corresponding to said first data and having a data amount smaller than that of said first data.

However, Suma does disclose capability of:

- A digital data recording and reproducing device (i.e., video signals) [abstract, fig. 1-4, col. 1, lines 5-10.] comprising capabilities of:

- error detecting and concealing functionalities in supporting the data processing/recording/reproducing device via M bits having 11 and 12 samples data length [col. 3, lines 22 through col. 4, lines 25].

In addition, Otaka does explicitly disclose:

- An error concealing method having video data signaling [abstract, fig. 1, col. 1, lines 5-10] comprising

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- an error concealment applied to a detected error via variable length amount of data in supporting a digital signal recording and reproducing apparatus [fig. 1, col. 1, lines 53 through col. 2, lines 27 and col. 3, lines 11-31].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize that the Suma's error detecting and concealing functionalities in supporting the data processing/recording/reproducing device via M bits having 11 and 12 samples data length capability does perform such Applicant's second data corresponding to said first data and having a data amount smaller than that of said first data limitation. This is because Suma clearly applied these data/bit length for configuration, comparison, detection/correction, and performance in determining whether the system functioned properly; second, by applying the capability of error concealment applied to a detected error via variable length amount of data in supporting a digital signal recording and reproducing apparatus as taught by Otaka in conjunction with the digital data recording and reproducing device (i.e., video signals) as taught by Suma, the computer/data processing system, more specifically the error

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detection and concealment computing system, can enhance its operation performance, more specifically to ensuring the error thoroughly detected and concealed via signature and/or data/bit comparison process.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the error detection and concealment data processing/computing system operation availability and network/system performance therein with a mechanism to enhance the data connectivity, data debugging, data displaying, data reliability, and data throughput which eventually will increase its performance, such as data throughput between internal and external digital data recording and reproducing devices.

As per claim 2:

Suma further teaches:

- error concealment means for concealing an error if any found on said first data by use of said second data read from said data recording medium said first data being read from a data recording medium storing said first data [fig. 1-4, col. 3, lines 23-47].

Suma does not explicitly teach:

- second control means.

However, Suma does disclose capability of:

- A digital data recording and reproducing device (i.e., video signals) [abstract, fig. 1-4, col. 1, lines 5-10.] comprising capabilities of:

- error detecting and concealing functionalities in supporting the data processing/recording/reproducing device via controlling means [fig. 4, col. 3, lines 47-57].

In addition, Otaka does explicitly disclose:

- An error concealing method having video data signaling [abstract, fig. 1, col. 1, lines 5-10] comprising
- an error concealment applied to a detected error via read/write controllers in supporting a digital signal recording and reproducing apparatus [fig. 5, col. 5, lines 33 through col. 6, lines 32].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to realize that the combination of Suma's error detecting and concealing controller means and Otaka's read/write controllers in supporting a digital signal recording and reproducing

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apparatus capabilities do perform such Applicant's second control means limitation. This is because Suma and Otaka demonstrated the use of controller means for controlling data input/output, data comparison, and errors detection/concealment process in determining whether the system functioned properly. It is further obvious that by utilizing these controller means, the computer/data processing system, more specifically the error detection and concealment computing system, can enhance its operation performance, more specifically to ensuring the error thoroughly detected and concealed via signature and/or data/bit comparison process.

As per claims 3 and 6:

Suma further teaches:

- if no error is found on said first data, said error concealment means selectively outputs said first data and, if an error is found on said first data, selectively outputs said second data [fig. 1-4, col. 3, lines 23-67];
- read means for reading said first data or said second data from said data recording medium [fig. 1-4, col. 3, lines 23-47].

In addition, Otaka does explicitly disclose:

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- if no error is found on said first data, said error concealment means selectively outputs said first data and, if an error is found on said first data, selectively outputs said second data [fig. 1, col. 4, lines 46 through col. 5, lines 62];
- read means for reading said first data or said second data from said data recording medium [fig. 1, col. 5, lines 52 through col. 6, lines 2].

As per claims 4-5:

Suma further teaches:

- A **video** data processing apparatus comprising [abstract, fig. 1-4, col. 1, lines 5-10];
- first data is video data and said second data is video data obtained by lowering the resolution of video data as said first data (i.e., **a great quantity of effective data and improve the image quality by the error concealment**) [col. 4, lines 1-15].

Suma does not explicitly teach:

- resize means for resizing video data.

However, Suma does disclose capability of:

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- A digital data recording and reproducing device (i.e., video signals) [abstract, fig. 1-4, col. 1, lines 5-10.]

comprising capabilities of:

- error detecting and concealing functionalities in supporting the data processing/recording/reproducing device via M bits having 11 and 12 samples data length [col. 3, lines 22 through col. 4, lines 25].

In addition, Otaka does explicitly disclose:

- An error concealing method having video data signaling [abstract, fig. 1, col. 1, lines 5-10] comprising

- an error concealment applied to a detected error via variable length amount of data in supporting a digital signal recording and reproducing apparatus [fig. 1, col. 1, lines 53 through col. 2, lines 27 and col. 3, lines 11-31];

- data reconstruction, data synchronization, data detection/concealment in variable length [col. 1, lines 60 through col. 2, lines 2].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize that the Suma's error detecting and concealing

functionalities in supporting the data processing/recording/reproducing device via M bits having 11 and 12 samples data length capability does perform such Applicant's resize means for resizing video data limitation. This is because Suma clearly applied these data/bit length for configuration, comparison, detection/correction, and performance in determining whether the system functioned properly; second, by applying the capability of data reconstruction, data synchronization, data detection/concealment in variable length as taught by Otaka in conjunction with the digital data recording and reproducing device (i.e., video signals) as taught by Suma, the computer/data processing system, more specifically the error detection and concealment computing system, can enhance its operation performance, more specifically to ensuring the error thoroughly detected and concealed via signature and/or data/bit comparison process for the same reasons set forth as described in claim 1, *supra*.

As per claims 7-12:

Due to the similarity of claims 7-12 to claims 1-6 except for a data processing method comprising detecting errors step, concealing error step, control steps, etc... instead of the data processing apparatus for error detection and concealing means

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comprising a error detection means, error concealing means, control means, etc... as described in claims 1-6; therefore, these claims are also rejected under the same rationale applied against claims 1-6. **In addition, all of the limitations have been noted in the rejection as per claims 1-6.**

As per claims 13-18:

These claims are the same as per claims 1-6. The only minor different is that these claims are directed to a program for making a computer execute a data processing method instead of the data processing apparatus for error detection and concealing means comprising a error detection means, error concealing means, control means, etc... as described in claims 1-6. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that a computer program is a necessary item for such failure/error detection and concealing system. Since the computer failure/error detecting and concealing processing system obviously needs a means for instruction or code means resided within the computer program product for performing the instruction identifying, comparing, and processing including the failure/error detection and concealing processes. **Therefore,**

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these claims are also rejected under the same rationale applied against claims 1-6.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

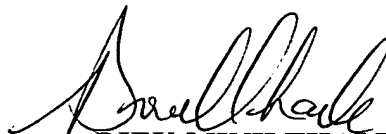
7. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The Tech Center 2100 phone number is (571) 272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DIEU-MINH THALE
PRIMARY EXAMINER
ART UNIT 2114

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